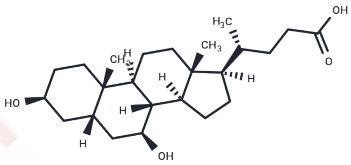
Data Sheet (Cat.No.T13506)

TargetMol

3β-Ursodeoxycholic acid

Chemical Properties



CAS No. : 78919-26-3

Formula: C24H40O4

Molecular Weight: 392.57

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	3β-Ursodeoxycholic acid (Isoursodeoxycholic acid) is a bile acid that exhibits good tolerance and good intestinal absorption when administered orally.3β-Ursodeoxycholic acid (Isoursodeoxycholic acid) can undergo enzymatic isomerization in the intestines and the 3β-Ursodeoxycholic acid (Isoursodeoxycholic acid) undergoes enzymatic isomerization in the intestine and liver and produces UDCA.
Targets(IC50)	Others,Drug Metabolite
In vitro	**METHODS**: Hep G2 cells were treated with 3β-Ursodeoxycholic acid (Isoursodeoxycholic acid) (100 μM) and ethanol (80 μM) to investigate the effects of 3β-Ursodeoxycholic acid (Isoursodeoxycholic acid) and ethanol on Hep G2 cells. The cytotoxic effects of 3β-Ursodeoxycholic acid (Isoursodeoxycholic acid) and ethanol on Hep G2 cells were investigated, as well as the interactions between them. **RESULTS** 3β-Ursodeoxycholic acid (Isoursodeoxycholic acid) did not show any cytotoxic effects and could be cytoprotective against ethanol-induced cell damage. [4] Translated with DeepL.com (free version)
In vivo	**METHODS**: 3β-Ursodeoxycholic acid (Isoursodeoxycholic acid) or UDCA (2.5 g/kg, orally, for 3 weeks) were given to rats , respectively , to compare the metabolism of UDCA and 3β-Ursodeoxycholic acid (Isoursodeoxycholic acid) in experimental cholestasis and the effects on cholestasis in rats. **RESULTS**3β-Ursodeoxycholic acid (Isoursodeoxycholic acid) was completely converted to UDCA in the liver; cholestasis and cholestatic bile acids were identical after intraduodenal administration of either compound. Oral administration of UDCA or 3β-Ursodeoxycholic acid (Isoursodeoxycholic acid) significantly improved hepatic biochemistry in chronic cholestasis, but not clinical and histologic parameters. [1] Translated with DeepL.com (free version)

Solubility Information

Solubility	DMSO: 135 mg/mL (343.89 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (8.41 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5473 mL	12.7366 mL	25.4732 mL
5 mM	0.5095 mL	2.5473 mL	5.0946 mL
10 mM	0.2547 mL	1.2737 mL	2.5473 mL
50 mM	0.0509 mL	0.2547 mL	0.5095 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Purucker E, et al. Metabolism and effects on cholestasis of isoursodeoxycholic and ursodeoxycholic acids in bile duct ligated rats. Biochim Biophys Acta. 2001 Apr 3;1526(1):44-52.
Marschall HU, et al. Isoursodeoxycholic acid: metabolism and therapeutic effects in primary biliary cirrhosis. J Lipid Res. 2001 May;42(5):735-42.
Beuers U, et al. Formation of iso-ursodeoxycholic acid during administration of ursodeoxycholic acid in man. J Hepatol. 1991 Jul;13(1):97-103.
Marschall HU, et al. Study of human isoursodeoxycholic acid metabolism. J Hepatol. 1997;26(4):863-870.